

IN THE SPECIFICATION:

1. Please replace paragraph 9 on page 4 with the following paragraph showing changes.

However, after using the timing-jamming technique, the symbols may still be rotated by an arbitrary offset angle, and thus may be misinterpreted by the equalizer, leading to erroneous output. Further, since the output of the equalizer may be used to retrain or fine tune the equalizer at the next transfer from the control channel to the primary channel, these output errors can result in poor equalizer performance. The retrained equalizer's erroneous coefficients may significantly differ from the coefficients obtained during the phase three initialization period of the receiving fax machine. The phase three coefficients may be of little use in helping the equalizer to interpret any incoming symbols, which could greatly increase the time necessary for equalizer retraining and reinitialization for symbol interpretation after primary channel transfer.

2. Please replace paragraph 32 on pages 11-12 with the following paragraph showing changes.

The disadvantageous rotation of signals by an arbitrary phase angles when the signal receiver 110 uses various signal analysis techniques, such as timing jamming, may be substantially compensated for by the angle determination circuitry 120. The angle determination circuitry 120 of the present invention advantageously calculates an angle between certain known ideal points and actual received points from the output of the receiver 110. The angle determination circuitry 120 can include either hardware, software, or the combination of both hardware and software configured ~~configured~~ for calculating the angle between the ideal and actual points. For instance, the angle determination circuitry 120 can be a digital signal processor executing instructions for calculating the angle between the ideal and actual points.

3. Please replace paragraph 36 on page 13 with the following paragraph showing changes.

Turning now to FIGURE 2C, illustrated is a diagram of the signal of the signal of FIGURE ~~2B~~ 2A that has been rotated by an unknown offset angle to the angles of S0 and S1, as measured from the positive X axis. There is still a 90° differential between the two symbol points A and B of the signal S, but the two symbol points have been rotated by an unknown angle after the signal analysis technique of timing jamming has been applied. However, the facsimile receiver 100 could also equally validly assign angle S0 to point A and angle S1 to point B.

4. Please replace paragraph 45 on page 17 with the following paragraph showing changes.

After executing either the step 325, 340 or 350, the equalizer should be ready to more accurately decode the received symbols, which are now angle compensated for the effects of the timing jamming angle rotation. Additionally, a PP signal, as defined in ITU V.34 protocol, may then be used, if desired, to fine tune the equalizer coefficients in a step 360. Since the timing jammed, angle compensated PP signal output coefficients of the equalizer should already be close to the phase three coefficients used by the equalizer in interpreting incoming symbols, it takes but little time to more precisely train the equalizer with the PP signal to receive the full constellation of symbols used in the primary channel transmissions. The signal PP may be used in an analogous manner as the signal S in FIGURE 3 after the transfer from the control to the primary channel. In any event, the angle determination circuitry ~~120~~ 240 then ends for the received symbol in a step 365, although the equalizer would still interpret the received symbol.